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SCIENCE AND MAN Joshua Lederberg

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HUMAN SEXUAL RESPONSE by Masters and Johnson has been a best seller since its first appearance months ago. This column is not intended to compete with deadline-oriented newsstories and book reviews. The book is, however, likely to be of more than passing interest, and I have just now had the occasion to read it.

The title vaguely disturbed me, and then I realized there was very little uniquely human in the findings reported. Much the same kind of information might be obtained from observations on chimpanzees. However, the apes might be less willing to cooperate in the acquisition of physiological data during coition than the human subjects (prostitutes, volunteers and "marital units") investigated here. It would be of particular interest to know whether a female ape would take any interest in the plastic sex machine that was used by Masters and Anderson for measurements on blood vessel changes in the vagina. They remark (p. 21) "In view of the artificial nature of the equipment, legitimate issue may be raised with the integrity of observed reaction patterns. Suffice it to say that intravaginal physiological response corresponds in every way with previously established reaction patterns observed and recorded during hundreds of cycles in response to automanipulation."

The book is an authoritative review of present information on the overt physical aspects of sexual function of men and women. In this respect it is far more explicit, clear, and reliable than most of the widely read marriage manuals and other counselling literature. It includes a relatively small amount of useful new physiological research, mostly on blood vessel changes in the sex organs, and general circulatory and respiratory side effects. Objective information like that on duration of different phases is always useful. I would recommend the book highly, precisely because it does not say a great deal about the physiology of the sexual process. What it does say is credible, and any number of myths about "technique" are happily deflated. The main piece of counselling that comes from the physiology is, in paraphrase, "do what comes naturally and vocalize (i.e., talk) to one another about what you do and don't like." There is every reason for anyone old enough to understand the mildly jargonistic language to know what this book has to offer about an important aspect of human life. The very severe limit on our reliable scientific knowledge of sex is the most trenchant message of the book.

My main concern is that anyone take this very seriously as an exposition of more than the most trivial aspects of human sexuality. The quotation about artificial coition is in point. The vaginal changes may be comparable to auto-manipulation; but what does this have to do with what goes on in the human brain? Almost nothing is said of the other organs which are no less important than the genitalia in human sexuality -- the whole body surface, vision, speech, hearing, chemical senses. An objective review of actual sexual behavior would show that only a small aspect of its real content is covered by the observations recorded in the book. There are few physiological processes which so comprehensively involve the entire organism, sometimes unhappily by default.

The scientific study of sex is sometimes faulted as an effort to take the human meaning out of it. But this could only be true of bad science, or of too hasty an interpretation of the facet-by- facet approach that is often imposed on the investigation of complex issues. If we know so little of, say, the neurophysiology of the orgasm, we are even poorer in our actual knowledge of the psychological aspects of sexual behavior in man. For example, we know almost nothing about the subtler consequences of total abstinence, except that sheer survival is unimpaired. Fuller studies of the human sexual response are badly needed, but to reach what is meaningfully human they will have to be far more searching in their surveillance of very complex behavior than the measurement of blood pressures. Investigation at this level has about the same relationship to human sexuality as the anatomy of the fingers to the playing and enjoyment of a Beethoven sonata.

Freudian psychoanalysis has reminded us of the prevalence of sexual symbols in everyday life. The significance of sex as a primary drive in man, involved at least unconsciously in almost all of his experience, is now generally acknowledged. But it has always been puzzling that this dominant drive is the most easily disturbed by emotional difficulties. Sexual function is taken (perhaps too impulsively) to be almost diagnostic of mental health, at least with respect to the minor neuroses. Much less widely advertized is the symbolic content of sex itself. The converse aggregation of the framework of outer experience into communication with a partner is the utmost measure of sexual experience. Shakespeare's wry "cork in a bottle" would not captivate the human race if that were the whole story. Efforts like Masters' and Anderson's book to focus on some specialized, isolatable, and measurable aspects of sex must not be taken as the whole message of Science to Man on this subject.